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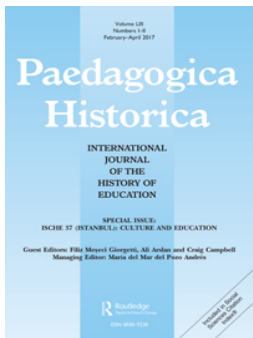
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## A culture of knowledge production: testing and observation of Dutch children with learning and behavioural problems (1949–1985)

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### ABSTRACT

This article focuses on the role the Dutch school for children with “learning and behavioural problems” (LOM) has played in knowledge production about learning disabilities and in the development of academic study of special education between 1949 and 1985. LOM-schooling grew rapidly during these years and attracted relatively many experts. In the selection and admission of LOM-children they had to be distinguished from normal, mentally deficient, and “very difficult” children. Around 1970 experts shifted their focus from the distinction between LOM-children and the latter to the difference between LOM- and mildly mentally retarded children, which turned out to be too small in the end to justify a separate school. The LOM-school’s culture of knowledge production has stimulated both testing and the study of learning problems and their treatment. It functioned as a laboratory for the development of therapeutic treatment for learning disabilities. In particular, the systematic reflection on the practice of remedial teaching was relevant in the development of child science.

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### Introduction

During the 1950s and 1960s the process of “normalising” childhood, referring to both the differentiation between the normal and the abnormal and the adjusting of the latter reached a new phase.<sup>1</sup> Across the West special education grew and differentiated significantly. New types of schools and classes for newly recognised categories of special-needs children appeared. Next to the already existing schools for sensorial or physically handicapped and “feeble-minded” children, special schools and remedial classes were created for children with only minor mental deficiencies, like mild mental retardation, special learning disabilities, and behavioural disorders.<sup>2</sup> With the feeble-minded these learning-disabled or emotionally

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<sup>1</sup>André Turmel, *A Historical Sociology of Childhood: Developmental Thinking, Categorization and Graphic Visualization* (Cambridge: Cambridge University Press, 2008); André Turmel, “Childhood and Normalcy: Classification, Numerical Regularities and Tabulations,” *Journal of Educational Research* 27 (1998): 661–72.

<sup>2</sup>Gerald Coles, *The Learning Mystique: A Critical Look at “Learning Disabilities”* (New York: Fawcett Columbine, 1987); James M. Kauffman and Timothy J. Landrum, *Children and Youth with Emotional and Behavioral Disorders* (Austin: Pro-Ed, 2006).

disturbed children were brought together under the label “mentally subnormal” and they were conceived of as at risk of mental ill health and delinquency. Particular interest in this large and ill-defined group of children was demonstrated, for example, by the World Health Organization (WHO), which installed an Expert Committee that reported on this theme in 1954 and organised a seminar in Oslo in 1957 on the “mental health of the subnormal child”, attended by 43 experts from 13 European countries.<sup>3</sup> The WHO report encouraged governments and private initiative to develop programmes and services for intellectually, emotionally, or morally “subnormal” children.<sup>4</sup>

Mounting interest in this wide, intermediate category of only slightly deviant children grew partly out of intellectual and institutional developments that had started in the interwar years with the mental hygiene movement and the establishment of the first child guidance clinics. They were reinforced after the war by the wide approval of John Bowlby’s and Anna Freud’s application of psychoanalytic theory to children’s health and emotional well-being, emphasising the potential abnormality of every child. Partly the war itself and its aftermath of social disruption seem to have stimulated an increased fear among professionals and politicians of the masses, of maladapted and delinquent youth, and of the developing new, independent, and therefore potentially subversive, mass youth culture.<sup>5</sup> Additionally, and more than in previous years, during this period of sustained economic growth and industrial development across the West governments made an effort to educate as many learning-disabled children as possible and turn them into useful citizens of society.<sup>6</sup>

Child sciences seem to have played an important role in this respect. Child psychiatry, developmental psychology, and educational psychology had become established fields of research in the interwar years, particularly in German, French, and English-speaking countries.<sup>7</sup> Building on these sciences the study of special education seems to have gained significance and impact during these years. This is demonstrated, for example, by the size of the Second International Congress on Orthopedagogics (*Second Congrès International pour la Pédagogie de l’Enfance Déficiente*), which was held in Amsterdam in 1949. Here some 700 delegates from 31 countries discussed the education of all kinds of handicapped children, from the blind and deaf to the “very difficult”, “neglected”, and “partially defect” ones, as well as the training of future special educationalists.<sup>8</sup> Apparently, the conference marks the acceleration of a process of scientisation of the teaching of special-needs children. In the Netherlands, for example, the postwar years saw not only a rapid extension of special

<sup>3</sup>M.A. Stolk, “Mental Health of the Subnormal Child,” *Tijdschrift voor Buitengewoon Onderwijs en Orthopedagogiek* 37 (1957): 167–73.

<sup>4</sup>*The Mentally Subnormal Child. Report of a Joint Expert Committee Convened by WHO with the Participation of United Nations, ILO, and Unesco* (Geneva: WHO, 1954); Stolk, “Mental Health”. Prevention of mental subnormality was a key interest throughout the 1950s. See, for example, Richard L. Masland, Seymour B. Sarason, and Thomas Gladwin, *Mental Subnormality: Biological, Psychological, and Cultural Factors* (New York: Basic Books, 1959).

<sup>5</sup>John Stewart, *Child Guidance in Britain, 1918–1955: The Dangerous Age of Childhood* (Abingdon: Taylor & Francis, 2013); Mathew Thomson, “Mental Hygiene as an International Movement, 1918–1939,” in *International Health Organisations and Movements*, ed. Paul Weindling (Cambridge: Cambridge University Press, 1995), 283–304; Marijke Gijswijt-Hofstra and Roy Porter, eds., *Cultures of Psychiatry and Mental Health Care in Postwar Britain and The Netherlands* (Amsterdam: Rodopi, 1998); Nelleke Bakker, “Child Guidance and Mental Health in the Netherlands,” *Paedagogica Historica* 42 (2006): 769–91.

<sup>6</sup>Kees Schuyt and Ed Taverne, *1950: Prosperity and Welfare. Dutch Culture in a European Perspective* (Den Haag: SDU, 2000); John K. Galbraith, *The Affluent Society* (London: Deutsch, 1977).

<sup>7</sup>“History of Educational Sciences”, ed. Rita Hofstetter and Bernard Schneuwly, *Paedagogica Historica* 40, nos. 5–6 (2004): 569–784; Turmel, *A Historical Sociology*.

<sup>8</sup>*Proceedings of the Second International Congress on Orthopedagogics, Amsterdam 18–22 VII 1949*, ed. I.C. van Houte and Berthold Stokvis (Amsterdam: Systemen Keesing, 1950).

education, but the academic recognition and development of the study of learning disabilities as well. They seem to have mutually stimulated each other's growth and development.<sup>9</sup>

Research into the history of special education has so far focused primarily on the first half of the twentieth century, when policies and interventions focusing on the identification and separation of "feeble-minded" children were developed and special schooling and educational support for these children were institutionalised.<sup>10</sup> The foremost instrument of selection for these schools at the time – intelligence testing – has also received ample scholarly attention.<sup>11</sup> The postwar years, however, when new kinds of special education for newly "discovered" kinds of special-needs children developed and new techniques to differentiate between the newly recognised categories of children developed, have as yet received hardly any attention. Nevertheless, these were the years in which more sophisticated evaluation techniques and science-based methods of remedial teaching of children with all kinds of learning disabilities were developed.

This article addresses the culture of knowledge production in the selection for and teaching in Dutch schools for children with so-called "learning and behavioural problems" (*leeren opvoedingsmoeilijkheden*, LOM), that were established from 1949. As part of the publicly financed education system these schools were unique and they were immediately successful in terms of numbers. That is why they were largely responsible for the fact that, from an international perspective, the Dutch were champions of segregation of special-needs children.<sup>12</sup> LOM-pupils had a "normal" IQ but had failed at regular school because of special learning disabilities, like dyslexia. Which instruments and techniques were used by these schools to identify these children and remedy their learning problems? Did these schools play a role as "laboratories" for the developing child sciences? And if so, which?

As regards the history of testing, research has likewise focused almost exclusively on the first half of the century. It has, moreover, focused almost exclusively on intelligence testing. For the English-speaking world it has been claimed that the growth of special education implied an increased need for intelligence testing.<sup>13</sup> Testing, moreover, is frequently recognised as the main expression of the scientisation of education or the maturation of an

<sup>9</sup>Nelleke Bakker, "Identifying the 'Subnormal' Child in an Age of Expansion of Special Education and Child Science in the Netherlands (c. 1945–1965)", *History of Education* 44 (2015): 460–79.

<sup>10</sup>Mathew Thomson, *The Problem of Mental Deficiency: Eugenics, Democracy, and Social Policy in Britain, c.1870–1939* (Oxford: Oxford University Press, 2006); James W. Trent Jr., *Inventing the Feeble Mind: A History of Mental Retardation in the United States* (Berkeley: University of California Press, 1994); Ian Copeland, *The Making of the Backward Pupil in Education in England, 1870–1914* (London: Woburn Press, 1999); Dorien Graas, *Zorgenkinderen op school. Geschiedenis van het speciaal onderwijs in Nederland, 1900–1950* [Problem children at school. The history of Dutch special education, 1900–1950] (Leuven/Apeldoorn: Garant, 1996).

<sup>11</sup>Gillian Sutherland, *Ability, Merit and Measurement: Mental Testing and English Education, 1880–1940* (Oxford: Clarendon Press, 1984); Theresa Richardson and Erwin V. Johanningmeier, "Intelligence Testing: The Legitimation of a Meritocratic Educational Science," *International Journal of Educational Research* 27 (1998): 699–714; Adrian Wooldridge, *Measuring the Mind: Education and Psychology in England, c. 1860–1990* (Cambridge: Cambridge University Press, 1994); Mathew Thomson, *Psychological Subjects: Identity, Culture, and Health in Twentieth-Century Britain* (New York: Oxford University Press, 2006), 109–39.

<sup>12</sup>Comparable schools for this wide category of pupils were not found in the 1980s in Italy, Denmark, Sweden, Germany, Belgium, England, or the United States: Sip J. Pijl and Cor J.W. Meijer, "Does Integration Count for Much? An Analysis of the Practices of Integration in Eight Countries," *European Journal of Special Needs Education* 6 (1991): 100–11. Privately organised and financed reading clinics and classes were, however, established from the late 1930s, for example in the United States and in Copenhagen: V.W.D. Schenk and A.N. Korndörffer, *Lees- en schrijfstoornissen bij kinderen. Genese, symptomatologie en verwante aandoeningen* [Reading and writing disabilities of children. Genesis, symptomatology, and related disabilities] (Den Haag: Stols, 1951), 5.

<sup>13</sup>Richardson and Johanningmeier, "Intelligence Testing"; Wooldridge, *Measuring the Mind*.

educational research culture.<sup>14</sup> For the Netherlands it has been demonstrated that intelligence testing of school children did not play an important role before World War II. Unlike in the US, intelligence testing was not used to study entire populations of regular schools in terms of hereditary differences between ethnicity and class and there was no intellectual movement that linked mass testing to eugenic ideals of social improvement.<sup>15</sup> And unlike in Britain, intelligence testing was not used in the selection of children for secondary schooling.<sup>16</sup> In the Netherlands, intelligence testing was used only when indicated for individual children and only in the selection of children for schools for the feeble-minded.<sup>17</sup>

This raises the question whether intelligence tests played a role as a gate-keeping instrument for the newly established LOM-schools after the war? And if so, which? Or were they replaced with other instruments and techniques to identify LOM-children as different from “normal” children and make a distinction between them and mildly mentally retarded children on the one hand and between them and “very difficult” or “psychopathic” children on the other, categories for each of which a different kind of special school existed? And which scientific claims were attached to the instruments that were used to create “useful” knowledge about LOM-pupils, their learning, behaviour, and educational needs? Did schools and researchers stick to testing and other “quick” means or did they also continue to rely on less objective or scientific and “slow” means like classroom observation by teachers?

The first section of this article addresses the history of the Dutch LOM-schools from 1949 up to the mid-1980s, when integration of not seriously handicapped children into regular schooling instead of separation became official policy after segregation of learning-disabled children had been criticised for some time across the West; it was only a matter of time before the LOM-school would merge with the school for mildly mentally retarded children in the 1990s.<sup>18</sup> This section also discusses the way LOM-children were selected and admitted. The final part focuses on the knowledge production on LOM-pupils and their educational needs by researchers involved with LOM-schooling.

## The LOM-school and its pupils: development and selection

In 1949 the Dutch government created the LOM-school as one of a total number of 14 kinds of special school recognised in a royal decree. This school was explicitly meant for children with a normal IQ who were nonetheless troubled by specific learning difficulties or “partial defects” like dyslexia or dyscalculia and by behavioural problems that were likely to be caused by their learning difficulties. The new variety of special school grew out of local initiatives, like the one in Amsterdam where a psychologist had started to teach children

<sup>14</sup>Christian Ydesen, “The International Space of the Danish Testing Community in the Interwar Years,” *Paedagogica Historica* 48 (2012): 589–99; Martin Lawn et al., “Embedding the New Science of Research: The Organised Culture of Scottish Educational Research in the Mid-twentieth Century,” *Paedagogica Historica* 46 (2010): 357–81.

<sup>15</sup>Stephen J. Gould, *The Mismeasure of Man* (New York: Norton, 1981).

<sup>16</sup>Lawn et al., “Embedding the New Science of Research”.

<sup>17</sup>Ernst Mulder and Frieda Heyting, “The Dutch Curve: The Introduction and Reception of Intelligence Testing in the Netherlands, 1908–1940,” *Journal of the History of the Behavioural Sciences* 34 (1998): 349–66; Fedor de Beer, *Witte jassen in de school. De schoolarts in Nederland ca. 1895–1965* [White coats in the school. The school doctor in the Netherlands c. 1895–1965] (Assen: Van Gorcum, 2008), 248–64.

<sup>18</sup>Pijl and Meijer, “Does Integration Count for Much?”; Nelleke Bakker, Jan Noordman, and Marjoke Rietveld-van Wingerden, *Vijf eeuwen opvoeden in Nederland. Idee en praktijk 1500–2000* [Five centuries of education in the Netherlands. Ideas and practices 1500–2000] (Assen: Van Gorcum, 2006), 677–83.



Table 1. Pupils of the Dutch schools for LOM, MLK, and ZMOK<sup>#</sup> children.

Year	All pupils in special schools	LOM		MLK		ZMOK	
		LOM- pupils	LOM as % of all special pupils	LOM as % of all elementary pupils	MLK- pupils	MLK as % of all special pupils	ZMOK as % of all special pupils
1954	41,236	866	2.1	0.1	30,891**	74.9**	1134
1962	57,730	6,033	10.5	0.4	32,330	56.7	1556
1970	74,061	16,144	21.8	1.1	33,950	45.8	2169
1978	87,253	28,531	32.7	1.9	32,650	37.4	3956
1986	103,047	40,092	38.9	3.2*	32,222	31.3	5221

<sup>#</sup>LOM = learning and behavioural problems; MLK = mildly mentally retarded; ZMOK = very difficult.

\*1985; \*\*MLK plus pupils of schools for seriously mentally deficient children.

Doornbos and Stevens, *De groei*, 15; C.M. van Rijswijk, *De hulpverlening van de LOM-school. Een onderzoek naar verschillen tussen scholen voor kinderen met leer- en opvoedingsmoeilijkheden en scholen voor regulier onderwijs* [Assistance at the LOM-school. An inquiry into the differences between LOM- and regular schools] (Amsterdam: Gemeentelijk Pedotherapeutisch Instituut, 1986), 21.

with “partial defects” during the war.<sup>19</sup> This is why, during the 1950s, the LOM-school was often referred to as the “school for partial defects”.<sup>20</sup>

The newly created school for children with learning and behavioural problems (LOM) was an immediate success in quantitative terms. The number of these schools grew from five in 1950 (with 476 pupils) to 110 in 1968 (with c. 12,000 pupils) and 300 in 1982 (with c. 35,000 pupils).<sup>21</sup> These schools absorbed a rapidly growing percentage of all primary pupils (aged 6–12): from 0.3% in 1960 to 1.1% in 1970 and 2.4% in 1980, against a decreasing total number of primary pupils in the 1970s.<sup>22</sup> This growth becomes even more remarkable when set against the much slower growth rate of the school for “very difficult” (*zeer moeilijk opvoedbare*, ZMOK) children and the stagnation of the growth of the special schooling of mildly mentally retarded (*moeilijk lerende*, MLK) children from the 1960s, followed by a reduction from the 1970s (Table 1). LOM-schools continued to grow and include an ever-increasing share of both all special pupils and all pupils in elementary education. In 1982 LOM-pupils for the first time outnumbered the pupils of the MLK-schools: 35,092 as against 33,012 pupils. The latter kind of school had developed from the 1930s, and particularly the 1950s, out of the undifferentiated schools for feeble-minded children. The numbers of pupils of the schools for more seriously mentally deficient (*zeer moeilijk lerende*, ZMLK) children, which are not included in Table 1 except for 1954, have always been much lower than those of MLK-schools.<sup>23</sup> From the 1960s waiting lists were part of the downside of the unrestrained growth of LOM-schooling.<sup>24</sup>

<sup>19</sup>Mineke van Essen, *Wilhelmina Bladergroen. Vrouw in de eeuw van het kind* [Wilhelmina Bladergroen. Woman in the century of the child] (Amsterdam: Boom, 2012), 11–131.

<sup>20</sup>For example, D. Wiersma, *Orthopaedagogische beschouwingen* [Reflections on special education studies] (’s-Gravenhage: HAGA, 1952).

<sup>21</sup>H.B. Meulenkamp, *Kinderen op de lom-school* [Children at the LOM-school] (Nijkerk: Intro, 1986), 19.

<sup>22</sup>Graas, *Zorgenkinderen*, 114.

<sup>23</sup>These children made up about one fifth of the total number of feeble-minded children at special schools: 7640 in 1962 and 8845 in 1970: K. Doornbos and L.M. Stevens, *De groei van het speciaal onderwijs* [The growth of special education] (’s-Gravenhage: SDU, 1989), 15.

<sup>24</sup>K. Doornbos, *Inventarisatie-onderzoek LOM-scholen* [Research inventory LOM-schools] (Utrecht: Stichting Onderzoek Leermoeilijkheden, 1965) 1: 217–20; A. van der Wissel, “Percepties van verschillen tussen LOM en ML-leerlingen. Interviews met naast-betrokkenen [Perceptions of differences between LOM and ML-pupils. Interviews with persons involved],” *Tijdschrift voor Orthopedagogiek* 58 (1978): 299–324.

As regards admission to the LOM-school, the Royal Decree of 1949 prescribed that the selection authority included three kinds of expertise. Alongside the head teacher of the receiving school and a physician “acquainted with psychiatric enquiry of children”, a “test psychologist” had to sit on the selection committee. This requirement applied equally to the school for “very difficult” children, formerly known as school for “psychopaths”. Until 1972 it did not apply to the schools for mildly or more seriously feeble-minded children, an exception that was probably made because the number of psychologists was still very limited in the immediate postwar years. Up to that time those schools continued to select their pupils in the way they had done before the war, with only the receiving head teacher and a school doctor as the admission authority. From 1967 the psychologist member of the admission authority of a special school could be replaced with a special educationalist “with a licence for testing”, an addition that reflected the availability of a first generation of special educationalists with a university degree.<sup>25</sup> They entered the labour market about a decade after child psychologists and child psychiatrists did. In each case this happened in the wake of the establishment of academic chairs in the respective child sciences from the 1950s.<sup>26</sup>

The multidisciplinary approach of the selection and admission of pupils to LOM-schools continued to exist. In the 1950s cities and regions created central selection and admission teams for their special schools, to which a (child) psychiatrist was now usually added. The next step was the addition of a social worker. Gradually, these selection and admission teams developed into expert guidance teams that became more particularly involved with observation of pupils in the LOM-school and with guidance of teachers and parents.<sup>27</sup> Testing by psychologists and licensed educationalists became both more important as an instrument of selection and more varied. More and more varied IQ tests became available. At first only the Dutch version of the Binet-Simon test, the Binet-Herderschêe test (1919), was used.<sup>28</sup> From 1962 a Dutch version of the American Wechsler Intelligence Scale for Children (WISC, 1939) became available as alternative and from 1976 a Dutch version of the Revised WISC (WISC-R). Shortly after 1970 this test became the new standard.<sup>29</sup> These and the Stanford-Binet IQ test were used in the selection for LOM-schools. Alongside intelligence tests, from the 1960s other tests were used as well, such as projective personality, visual, and motor tests, such as the old (1923) Oseretzky test which provided a motor quotient.<sup>30</sup>

<sup>25</sup>De Beer, *Witte jassen*, 263; G. Bolkestein and H. Menkveld, *Ontwikkelingslijnen naar speciaal onderwijs* [Developments towards special education] (Nijkerk: Callenbach, 1978), 72.

<sup>26</sup>Eric Haas, *Op de juiste plaats. De opkomst van de bedrijfs- en schoolpsychologische beroepspraktijk in Nederland* [At the right place. The rise of business and school psychological practices in the Netherlands] (Hilversum: Verloren, 1995); Timo Bolt and Leonie de Goei, *Kinderen van hun tijd. Zestig jaar kinder- en jeugdpsychiatrie in Nederland 1948–2008* [Children of their own time. Sixty years of child and youth psychiatry in the Netherlands 1948–2008] (Assen: Van Gorcum, 2008); H. Baartman, “Ontwikkelingen in de theoretische orthopedagogiek [Developments in the theory of special education],” in *Orthopedagogiek: inzicht, uitzicht, overzicht* [Special education studies: insight, outlook, overview], ed. R. de Groot and J. van Weelden (Groningen: Wolters-Noordhoff, 1992), 46–74.

<sup>27</sup>N.Y. Vlietstra and T. Kingma, *De onderwijskundige en sociale zorg voor gehandicapte jeugd in Nederland* [Educational and social care for disabled youth] (Alphen aan den Rijn: Samsom, 1965); Doornbos, *Inventarisatie-onderzoek*; W.E. Vliegthart, “De psycholoog in de L.O.M.-school [The psychologist in the LOM-school],” in H. Bolle et al., eds., *Psychologen over het kind. Kinderpsychologische opstellen* [Psychologists on the child. Essays on child psychology] (Groningen: Wolters-Noordhoff, 1968), 63–76.

<sup>28</sup>M. Schouten and N.J.A. van Oudenhoven, “De Binet-Herderschêe-intelligentietest en haar waarde als selectie-instrument,” *Tijdschrift voor Zwakzinnigheid en Zwakzinnigenzorg* 6 (1969): 180–96. The authors show that in 1969 69% of all selection authorities still used this test. See also: Bakker, “Identifying the ‘Subnormal’ Child”.

<sup>29</sup>R.A. Roe, “Testgebruik in Nederland. De N.I.P.-enquêtes van 1967 en 1971 [The use of tests in the Netherlands. The N.I.P.-surveys of 1967 and 1971],” *De Psycholoog* 9 (1974): 59–70.

<sup>30</sup>T.J.C. Berk, J. van Weelden, and A.J. Wilmink, *Kinderen met leer- en opvoedingsmoeilijkheden aan twee Amsterdamse L.O.M.-scholen* [LOM-children at two Amsterdam LOM-schools] (Utrecht: Bijleveld, 1963).



With the greater importance of testing, the role of medical expertise lost part of its relevance, except for the demarcation between “difficult” LOM and “very difficult” ZMOK children, for which psychiatric expertise was considered indispensable.<sup>31</sup> The role of teachers, on the other hand, remained important, as detailed observation reports of learning-disabled children continued to be written by teachers of regular and special schools, as well as in newly created observation classes in pedagogical centres of expertise. An increasing part of these reports were written by special educationalists with a university degree. However, as the admission to special schools became more centralised, IQ scores seem to have become even more decisive as regards the placement at either a LOM-school or a school for mildly mentally retarded (MLK) children.<sup>32</sup>

Though normally gifted intellectually, LOM-candidates had a poor school performance, comparable to that of mildly mentally retarded children. On average they were two years behind other pupils and they had usually repeated at least one grade. Therefore, intelligence testing was considered crucial to distinguish between these two categories of children. Experts warned that mentally retarded children had to be kept out of the LOM-school in order to guarantee the new school's effectiveness.<sup>33</sup> The difference between indications for the LOM-school and the school for “very difficult” children was to be found in the seriousness of the children's behavioural problems. “Very difficult” children were also normally gifted intellectually, but they were much more emotionally disturbed and they frequently came from broken homes, experts claimed.<sup>34</sup> The behavioural trouble of LOM-children was said to be directly related to their learning difficulties. According to experts these caused “inhibitions”, “failure anxiety”, and “feelings of inferiority”.<sup>35</sup> In cases of doubt between admission to either a LOM-school or a school for “very difficult” children (ZMOK) the availability of a school of the latter type in the environment and the perceived strength of a LOM-school's team seem to have been decisive.<sup>36</sup>

The LOM-school provided a safe haven for its pupils. They could profit from an individualised approach in a much smaller group, the normative size of the classes being about two and a half times smaller than those in regular schools.<sup>37</sup> In the 1960s LOM-classes counted on average no more than 13 pupils, as against 15 at schools for mildly mentally retarded

<sup>31</sup>Doornbos, *Inventarisatie-onderzoek*, 197–214; D. Wiersma, “Z.M.O.K. of L.O.M., een dilemma [ZMOK or LOM, a dilemma]”, *Tijdschrift voor Orthopaedagogiek* 1 (1962): 204–24; K. de Bloois and Wilhelmina J. Bladergroen, *Z.M.O.K.- en L.O.M.-scholen* [ZMOK- and LOM-schools] (Amsterdam: Nationale Federatie voor Kinderbescherming, [1970]); J. van Weelden, “Leerstoornissen en emotionele problematiek [Learning disabilities and emotional problems]”, *Tijdschrift voor Orthopaedagogiek* 18 (1979): 395–403.

<sup>32</sup>Bremer et al., *Een LOM-school*; Pijl, *Het toelatingsonderzoek*. The latter researcher analysed the use of these instruments and concluded that IQ testing was the single decisive instrument of selection in the admission procedures of LOM- and MLK-schools in the 1980s.

<sup>33</sup>Th. Hart de Ruyter, *Debilitas mentis, zwakbegaafdheid en vertraagde ontwikkeling* [Debilitas mentis, mental subnormality, and retarded development] (Groningen: Wolters, 1949).

<sup>34</sup>D. Wiersma, *Orthopaedagogische beschouwingen*; Wiersma, “Z.M.O.K. of L.O.M.”; A.J. Wilmink, “Enige selectieproblemen en ontwikkelingsaspecten rondom de scholen voor kinderen met leer- en opvoedingsmoeilijkheden [Some problems of selection and aspects of development concerning LOM-schools]”, *Tijdschrift voor Buitengewoon Onderwijs en Orthopaedagogiek* 41 (1961): 65–77.

<sup>35</sup>Berk et al., *Kinderen*, 91–7; De Bloois and Bladergroen, *Z.M.O.K.- en L.O.M.-scholen*; Van Weelden, “Leerstoornissen”.

<sup>36</sup>Doornbos, *Inventarisatie-onderzoek*, 197–205.

<sup>37</sup>In the early 1950s special schools had a normative range of between 12 and 24 pupils per class as against 45 in regular schools: “Uit het verslag van de hoofdinspecteur van het buitengewoon lager onderwijs. Overgenomen uit: Het onderwijs in Nederland. Verslag over het jaar 1954 [From the report of the chief inspector of special education. Taken from: Schooling in the Netherlands. Report on the year 1954]”, *Tijdschrift voor Buitengewoon Onderwijs en Orthopaedagogiek* 37 (1957): 113–7, 135–9, 155–7, 173–7, esp. 115.

children, and tasks were often performed in groups of only three or four pupils.<sup>38</sup> The small size of the classes in LOM-schools may be the reason why the selected pupils' parents – unlike those of feeble-minded children<sup>39</sup> – were not reported to have opposed placement of their child at this kind of school. Selection criteria, moreover, often included willingness of the parents to cooperate with the therapeutic treatment of their child.<sup>40</sup> Therefore, it is not a surprise that, unlike special education in general and MLK- and ZMOK-schools in particular, LOM-schools did not recruit their pupils primarily from the lower classes but from a cross-section of society.<sup>41</sup> And neither is it a surprise that referrals to a LOM-school were at first usually initiated by the regular school,<sup>42</sup> and later more often by the parents themselves.<sup>43</sup> They probably conceived of the LOM-school as an opportunity for their child to receive proper help and support, as LOM-schools had a reputation for good schooling and ambitious working plans for their pupils.<sup>44</sup>

A closer look at the population of the LOM-schools and at the criteria for admission reveals that learning problems, attention deficit, and neuroticism were positive indications for selection. A subnormal IQ, psychopathic behaviour, and didactic neglect were the most important counter indications.<sup>45</sup> This was demonstrated, for example, by a study into LOM-pupils' learning problems by the Amsterdam Pedotherapeutic Institute, which was established in 1949 to scientifically guide the city's special schools. This study, issued in 1963, was based on a sample of the pupils of two local LOM-schools. It shows that most of them had a normal IQ score of between 90 and 110, whereas admission to a school for mildly mentally retarded (MLK) children required an IQ below 80 at the time. Another difference between the two kinds of school was the age of admission. Mentally retarded children were admitted to their schools mostly at ages seven and eight, after one and a half to two years of regular schooling. LOM-pupils were admitted considerably later, at ages nine and ten, after more years of experiencing failure and "discouragement" at the regular school, according to the researchers.<sup>46</sup> A final difference between the two types of school was purely theoretical, as pupils of the LOM-schools were expected to return to a regular school after therapeutic treatment in the special school. In reality, however, they hardly ever did, a fact that was not accepted until around 1970.<sup>47</sup> These differences, which were confirmed in 1965 in a much larger research study of 21 LOM-schools and their pupils in the Province of Utrecht, continued to exist.<sup>48</sup> The only difference that diminished was the

<sup>38</sup>*Statistiek van het buitengewoon lager onderwijs 1962–1966* [Statistics of elementary special education 1962–1966] ('s-Gravenhage: Staatsuitgeverij, 1971); A.J. Trinks-Bakker, C. Kiele-Potters, and K. Doornbos, *Inventarisatie-onderzoek LOM-scholen. Verslag van een terreinverkennd onderzoek* [Research inventory LOM-schools. Report on an exploratory study] (Utrecht: Stichting Onderzoek Leermoeilijkheden, 1968), 2: 15–28.

<sup>39</sup>For these complaints see, for example, Kevin Myers, "Contesting Certification: Mental Deficiency, Families and the State in Interwar England," *History of Education* 47 (2011): 749–66.

<sup>40</sup>Doornbos, *Inventarisatie-onderzoek*, 146–8; De Bloois and Bladergroen, *Z.M.O.K. en L.O.M.-scholen*.

<sup>41</sup>C.J.W. Meijer, *L.O.M.-onderwijs: verwijzing en toelating. Eindrapportage* [LOM-schooling: referral and admission. Final report] (Haren: SVO, 1982); Bremer et al., *Een LOM-school*.

<sup>42</sup>Berk et al., *Kinderen*.

<sup>43</sup>Meijer, *L.O.M.-onderwijs*.

<sup>44</sup>Van der Wissel, "Percepties".

<sup>45</sup>Doornbos, *Inventarisatie-onderzoek*, 139–214.

<sup>46</sup>Berk et al., *Kinderen*; Doornbos, *Inventarisatie-onderzoek*, 152. These authors reported the same ages.

<sup>47</sup>A.J. Wilmsink and I.C. van Houte, *Opvallende kinderen. Onontsloten gebied in de gewone lagere school* [Remarkable children. Unexplored territory in the regular elementary school] (Utrecht: Bijleveld, 1958), 22; Doornbos, *Inventarisatie-onderzoek*, 228–31.

<sup>48</sup>Doornbos, *Inventarisatie-onderzoek*.

age gap of two years. It was reduced to half a year in the 1970s, when LOM-pupils were identified and admitted at an earlier age.<sup>49</sup>

The report on the pupils of the two Amsterdam schools gives a description of their medical condition, the results of psychological tests, and an extensive description of their learning difficulties, acquired and missing competencies, and attitude towards learning and the teacher, leading to a description of each individual child. In spite of the obvious importance of the IQ score, the qualitative description of each child, his/her appearance, family background, and the educational peculiarities appear as much more important than the test results. The selected children's intelligence was tested with the German version of the WISC, the Hamburg Wechsler Intelligence Test for Children (Hawik, verbal and performal), and the revised Terman-Merrill or Stanford-Binet intelligence test.<sup>50</sup> Their emotional health and character were tested with Rohrschach's inkblots, Michigan Pictures, and free drawings of trees and people. The children's medical histories and the descriptions of their families were taken from the records of the school's selection procedure and were collected by psychiatric social workers, trained at one of the child guidance clinics. The Freudian dominance of child psychiatry in those days is reflected in frequent references to "overprotective" or "neglectful" mothers and of problems with "identification" with an alcoholic or absent father.<sup>51</sup>

The LOM-school's effectiveness in terms of compensating for a poor school performance turned out to be disappointing. Pupils of LOM-schools did not catch up.<sup>52</sup> They continued to be behind normal pupils in one or more basic scholastic competences like reading, writing, and arithmetic. Nevertheless, on the basis of prolonged classroom observation and extensive teachers' reports the researchers reporting on the Amsterdam LOM-pupils, like others involved with LOM-schooling, ascribed an intrinsic value to this kind of school because of its more individualised approach. The justification for this much more expensive school was found in relief for the regular school by taking away the burden of these poorly performing and maladapted pupils and in release for the emotionally disturbed child. The Amsterdam researchers claimed "being freed from tight feeling, learning to work with pleasure, and gaining courage for the future are invaluable positive results"<sup>53</sup> This confidence as regards the *raison d'être* of the LOM-school and the possibility to positively identify a "population nucleus" of LOM-children continued to reign until the late 1960s.<sup>54</sup>

Critical reflection on LOM-schooling developed only gradually and on a limited scale. At first it concerned either its rapid and unlimited growth<sup>55</sup> or its premature creation at a time when research into learning disabilities like dyslexia had hardly developed.<sup>56</sup> Gradually, critical voices multiplied, focusing not only on the uncontrolled growth but more particularly on the idea that LOM-children fitted a single profile, like having a partial defect. This critique

<sup>49</sup>Meijer, L.O.M.-onderwijs; J.M. van Meel, *Bedreigd denken. Cognitie bij kinderen met leermoeilijkheden* [Thinking under threat. Cognition of children with learning problems] (Groningen: Tjeenk Willink, 1975).

<sup>50</sup>J. Luning Prak, *Tests op school* [Tests at school] (Groningen/Djakarta: Wolters, 1952); [www.adng.nl/tests](http://www.adng.nl/tests) (accessed June 15, 2015). The Terman-Merrill or Stanford-Binet test was available in a Dutch standardised version from 1937. The Hawik-test was available from 1956 in a German version. Tests were often translated from a German, French or English original by individual psychologists for use in their own clinic, institution, or school psychological service.

<sup>51</sup>Berk et al., *Kinderen*, 91–7.

<sup>52</sup>Trinks-Bakker et al., *Inventarisatie-onderzoek*; Bremer et al., *Een LOM-school*.

<sup>53</sup>Berk et al., *Kinderen*, 182.

<sup>54</sup>Vliegenthart, "De psycholoog", 69. See also Doornbos, *Inventarisatie-onderzoek*, 146–8.

<sup>55</sup>Chief Inspectors of Special Schooling criticised the rapid growth of LOM-schooling from as early as the 1950s: Doornbos, *Inventarisatie-onderzoek*, 27–50.

<sup>56</sup>Wilhelmina J. Bladergroen, "De scholen voor kinderen met leer- en opvoedingsmoeilijkheden [The LOM-schools]," *Tijdschrift voor Buitengewoon Onderwijs en Orthopaedagogiek* 37 (1957): 145–9; Pijl, *Het toelatingsonderzoek*, 7.

was underpinned with research data showing a lack of objective criteria for admission and of common norms for the evaluation of test results and teachers' reports.<sup>57</sup> These were also the years in which the failure to make LOM-pupils return to the regular school was finally accepted. At the same time, however, LOM-schooling expanded into both secondary and infant schooling for toddlers conceived of as at risk of developing learning or behavioural problems.<sup>58</sup> In the meantime the LOM-school developed into a laboratory for special and individualised didactics, which in turn inspired regular schools to experiment with more individualised approaches to children with learning problems and with methods of remedial teaching.<sup>59</sup> Of all kinds of school LOM attracted most academics as advisors.<sup>60</sup> One of the main reasons for this may be precisely the theoretical possibility that a child could return to a regular school, which presupposed expert guidance at the special school.<sup>61</sup>

From the 1970s international developments stimulated a re-evaluation of separate schooling of special-needs children, the outcome of which turned out to be the ideal of integrating handicapped children into the regular school, with extra support.<sup>62</sup> This caused a more fundamental identity crisis for LOM-schooling, which now had to defend itself against both a critique that they isolated their pupils unduly from contact with "normal" children and against the growing expertise available in regular schools as regards remedial teaching of children with specific learning problems. Regular schools now experimented with more focused interventions like special observation or reading classes, which were found to be effective by researchers to the extent that they reduced the need for a child to be referred to a LOM-school.<sup>63</sup> These developments undermined the uniqueness of its approach as well as its authority in the field of orthodidactics.

International reformers' key argument against the separation of special-needs children – the burden of stigmatisation – did apply to the pupils of the Dutch LOM-schools, but on a much lower level than it did to mentally retarded children. In 1956 the authoritative professor of child psychiatry at the University of Groningen, Theo Hart de Ruyter, called the LOM-school a "heaven" for a child with learning problems, not just because of the smaller classes but also because of its release from the "strict, rigid, harnessed, degrading, and unpsychological" approach of the regular school.<sup>64</sup> Surveys among former pupils of LOM-schools administered in the early 1980s, however, not only showed that most of them were successful in society in that the large majority had completed vocational training and were properly employed. They also made clear that almost all of them kept silent at the workplace about having been a LOM-child. For a successful adult being educated in "heaven" was indeed something of which to be ashamed.<sup>65</sup>

<sup>57</sup>Doornbos, *Inventarisatie-onderzoek*, 185.

<sup>58</sup>Doornbos and Stevens, *De groei*, 17; Bolkestein and Menkveld, *Ontwikkelingslijnen naar speciaal onderwijs*; H.B. Meulenkamp, *Kinderen*.

<sup>59</sup>Meulenkamp, *Kinderen*.

<sup>60</sup>K. Doornbos, "Na 30 jaar. Enkele notities bij de ontwikkeling van het LOM-onderwijs (1949–1979) [After 30 years. Some notes on the development of LOM-schooling (1949–1979)]," *Tijdschrift voor Orthopaedagogiek* 18 (1979): 362–75.

<sup>61</sup>This was suggested by an inspector of special schooling in 1959: Doornbos, *Inventarisatie-onderzoek*, 34.

<sup>62</sup>Pijl and Meijer, "Does Integration Count for Much".

<sup>63</sup>Doornbos, "Na 30 jaar"; Van Rijswijk, *De hulpverlening*, 29–34; Bolkestein and Menkveld, *Ontwikkelingslijnen naar speciaal onderwijs*.

<sup>64</sup>Th. Hart de Ruyter, "Waarin onderscheidt het partieel defecte kind zich van het normale? [What is the difference between the child with a partial defect and the normal child?]," in *Het partieel defecte kind* [The child with a partial defect] (Rotterdam: De Koepel, 1956), 14.

<sup>65</sup>J.G. Brandsma and A.A.J. van Peet, "Sprekend verleden. Verslag van een enquête onder oud-leerlingen van een lom-school [The voice of the past. Report on a survey among former LOM-pupils]," *Tijdschrift voor Orthopedagogiek* 25 (1986): 598–608.

During the 1970s and 1980s LOM-schools absorbed the rapidly growing numbers of children diagnosed with dyslexia, which was now recognised as a learning disability for which specialised treatment in or outside the regular school was indicated.<sup>66</sup> The second group of pupils that was responsible for the continuous and even intensified growth of LOM-schooling were children diagnosed with Minimal Brain Damage/Dysfunction (MBD), one of the precursors of Attention Deficit Hyperactivity Disorder (ADHD). According to contemporary reports these children suffered from a short attention span, restlessness, impulsivity, and many other adversary conditions.<sup>67</sup> Therefore, it is not a surprise that the sex ratio of LOM-pupils in those days is comparable to that found today among children diagnosed with ADHD: four boys to every one girl<sup>68</sup> or even five to one.<sup>69</sup>

Finally, in the 1990s the LOM-school was forced to merge with the school for mildly mentally retarded (MLK) children into a single special school for children with learning disabilities.<sup>70</sup> Doubts as to the fundamental character of the difference between these two categories of children had grown since the 1970s. This scepticism was underpinned by a swelling stream of academic studies into the mental capacities and characteristics of the two groups of pupils, which will be discussed in the next section. Nevertheless, throughout their existence intelligence testing and its results have continued to play an important role in the categorisation and distribution of pupils between these two types of school, with the concept of what actually was a “normal” IQ according to admission authorities fluctuating between a minimum score of 75 and 90 in the 1980s.<sup>71</sup>

### Experts on the LOM-child

During the 1950s and 1960s experts were particularly concerned with either the characteristics of the various kinds of LOM-children who made up the “nucleus” of the population or with differentiation between LOM-pupils and “very difficult” children. With psychologists using all kinds of IQ tests to sort out pupils with or without a “normal” IQ, the borderline between the school populations of the LOM-school and the school for mildly mentally retarded (MLK) children seemed relatively well guarded. Children with more serious behavioural problems were less easy to identify. This explains why part of the early knowledge production was particularly pointed at the identification of the characteristics of learning-disabled and “difficult” (LOM) children as distinguished from “very difficult”

<sup>66</sup>In the Netherlands standardisation of diagnostic criteria and specialised treatment of dyslexia developed from the 1970s: Marjoke Rietveld-van Wingerden, *Van woordblindheid tot dyslexie. De geschiedenis van leesproblemen in het Nederlandse onderwijs* [From word blindness to dyslexia. The history of reading problems in Dutch schooling] (Leuven/Apeldoorn: Garant, 2016).

<sup>67</sup>See Nelleke Bakker, “Brain Disease and the Study of Learning Disabilities”, *Paedagogica Historica* 51, no. 3 (2015): 350–64.

<sup>68</sup>Meulenkamp, *Kinderen*, 19. For ADHD today, see Laura Batstra, *Hoe voorkom je ADHD? Door de diagnose niet te stellen* [How to prevent ADHD? By not diagnosing it] (Amsterdam: Nieuwezijds, 2012).

<sup>69</sup>Doornbos, *Inventarisatie-onderzoek*, 64; Bremer et al., *Een LOM-school*, 20.

<sup>70</sup>K. van Rijswijk and E. Kool, “De ontwikkeling van het speciaal onderwijs in de tweede helft van de 20<sup>e</sup> eeuw [The development of special education in the second part of the 20th century],” in *Het kind van de eeuw: het kind van de rekening?* [The child of the century and as victim?] ed. R. de Groot and J.D. van der Ploeg (Houten: Bohn Stafleu Van Loghum, 1999), 131–55.

<sup>71</sup>Pijl, *Het toelatingsonderzoek*. See also the files of the Groningen Youth Psycho-Hygienic Service (Jeugd Psychohygiënische Dienst) from the 1970s. Psychologists IQ-tested all children referred to this Provincial Service, mostly with the verbal and performal WISC (Wechsler Intelligence Scale), but also with the revised Terman-Merrill and Binet-Herderschêe tests.



(ZMOK) children. In this respect psychoanalysis and theories about inborn personality traits served as major sources of inspiration well into the 1970s.<sup>72</sup>

The most productive writer on the differentiation between LOM- and ZMOK-children was the psychiatrist D. Wiersma who had a long history of working with “psychopaths”, both adults and children, and was a well-known authority in this field. As head of the pedagogical laboratory of the city’s Public Health Department in The Hague he was responsible for the selection of children for the different kinds of special schools. He consistently referred to the LOM-school as a school for “partial defects”. In his view, both the LOM- and the ZMOK-school had a right to exist, as they were meant for different kinds of “difficult” children.

According to Wiersma, LOM-schools were meant for children with either a partial defect or low levels of concentration, whereas schools for “very difficult” children were meant for “psychopaths”, a concept he never stopped using. LOM-children had acquired “neurotic symptoms” (like nail-biting, bed-wetting, and sleeping problems) through experiences like “discouragement” because of a failure to live up to adult expectations, while psychopaths suffered from hereditary, constitutional, and consequently incurable mental illness, the “symptoms” of which were violence, stealing, wandering, lying, unreliability, egotism, crime, anti-social behaviour, and, especially for girls, sexual provocation, claims made on the basis of a large sample of files from his laboratory. Both groups had a disharmonious personality profile in that they had a “normal” IQ but failed at school. In the case of “psychopaths”, the disharmony was more profound and was the most significant aspect of their personality. They often came, moreover, from neglectful families. And unlike LOM-children, they usually belonged to the “nervous” or “amorphous” personality type. As psychopaths were dangerous to themselves and their environment, they needed to be identified as soon as possible and be separated from feeble-minded and LOM-children to prevent “contamination”. This implied for him that all children who failed in the first form of a regular school and all children who had to repeat a grade twice in the four lowest forms needed to be examined by a multidisciplinary team of experts, who were to use all kinds of intelligence and personality tests, alongside observation at a laboratory school and reports of the teachers at the regular school.<sup>73</sup> Indeed, in the 1970s, over half of LOM-pupils had repeated the first grade of regular school before being admitted to the special school.<sup>74</sup>

As to the “nucleus” of LOM-children, five kinds of “true” LOM-children were identified by experts. From the earliest days of the LOM-school, “word blindness” was the most frequently mentioned partial defect of a LOM-child. One could say that LOM-schools were established to primarily take care of dyslexic children. No consensus had yet been reached as to the causes or possible cure of this defect, but it was clear that these children needed extra support to learn to read and write properly. Unlike the second partial defect, “arithmetic disorder”, which was held to be a secondary reaction to emotional distress, dyslexia was generally considered to be a primary defect. Some experts conceived “word blindness” to be hereditary and caused by a neurological defect, a common belief before 1950. In the 1950s and 1960s, however, the majority was convinced that the environment was to blame and, consequently, that the trouble could be “cured” by individual remedial teaching in

<sup>72</sup>R.S. van Netten, *De l.o.m.-z.m.o.k. differentiatie in Amsterdam* [The LOM-ZMOK differentiation in Amsterdam] (Amsterdam: Vakgroep Ontwikkelingspsychologie, 1972); A. Meys, “Problemen bij de differentiatie tussen Lommers en Zmokers [Problems of differentiation between LOM- and ZMOK-children],” *Tijdschrift voor Orthopedagogiek* 13 (1974): 95–102.

<sup>73</sup>Wiersma, *Orthopedagogische beschouwingen*; Wiersma, “Z.M.O.K. of L.O.M.”

<sup>74</sup>Bremer et al., *Een LOM-school*, 35.



the LOM-school. Psychiatrists pointed more often at unfavourable family conditions and neuroses, for which child guidance clinics might offer a solution, while educationalists and educational psychologists found fault with insufficient motivation of the child, a lack of stimulation by the teacher, or too-large classes, conditions that were compensated for by the LOM-school.<sup>75</sup> The authoritative psychologist and founding “mother” of LOM-schooling, Wilhelmina Bladergroen, pointed at faulty perception and hiatuses in the sensorial and motor development as cause of what she called “legasthenia”.<sup>76</sup> This analysis made some LOM-schools use prisma-glasses for children with reading problems and practice sensomotor exercises to undo the effects of these assumed hiatuses.<sup>77</sup> The 1970s saw the theoretical emphasis in the discourse on reading problems shift from neurophysiology to cognition and away from neuroticism, motivation, and teaching as cause.<sup>78</sup> At the same time “dyslexia” became the standard label.

The third category of LOM-pupils who were often discussed in the 1950s and 1960s were children suffering from the effects of presumed brain damage or brain disease like encephalitis or epilepsy. Their key symptom was said to be distractibility or a short attention span at school. Although this defect was usually constitutional, in some cases it was the effect of emotional conflict, according to the professor of child psychiatry Hart de Ruyter.<sup>79</sup> This category of children was sometimes identified as suffering from the “choreatiform syndrome”, a label for constitutional hyperactivity developed around 1960 by the neuropsychologist H. Prechtl of the University of Groningen. From the 1970s they were more often labelled with MBD, a neurological disorder that had recently become more widely known in the United States.<sup>80</sup>

The final two groups of “true” LOM-children, making up the assumed “nucleus” of the LOM-population were the slow and retarded learners, who were, more particularly than the others, at first conceived of as capable of overcoming their learning problems with time. Bladergroen has always been convinced that these problems were reparable when children were properly guided in a LOM-school. “Slowness” could either be hereditary and constitutional, for example a disorder of the endocrine gland, or an effect of neuroticism, she and other experts claimed in the 1950s and 1960s.<sup>81</sup> According to Hart de Ruyter, “retarded learners” started their school career with a low IQ, but recovered to the extent that they reached a level above the borderline of feeble-mindedness (80 until the 1970s and between 80 and 90 afterwards).<sup>82</sup> They were likely to be “discouraged” at the regular school to such a degree that their “feelings of insufficiency” incapacitated them altogether. To prevent this

<sup>75</sup>Rietveld-van Wingerden, *Van woordblindheid tot dyslexie*.

<sup>76</sup>W.J. Bladergroen, “Over diagnostiek en therapie van leesstoornissen [On diagnostics and treatment of reading disabilities],” in *Leeszwakke kinderen* [Children with reading difficulties], ed. F. Grewel (Purmerend: Muusses, 1952), 34–54.

<sup>77</sup>Van Essen, *Wilhelmina Bladergroen*. These exercises were somewhat similar to D.L. Delacato’s approach to dyslexia by training the “body scheme”: Rietveld-van Wingerden, *Van woordblindheid*, 196–7. Bladergroen, like other experts, did not usually mention her sources of inspiration.

<sup>78</sup>This is illustrated by a comparison of subsequent editions of the most authoritative Dutch manual on learning disabilities of the 1970s: J.J. Dumont, *Leerstoornissen* [Learning disabilities], 2 vols. (Rotterdam: Lemniscaat, 1971); *ibid.*, 3rd rev. ed. (1978).

<sup>79</sup>Hart de Ruyter, “Waarin onderscheidt”.

<sup>80</sup>H. Prechtl, *Het cerebraal gestoorde kind* [The child with a cerebral defect] (Groningen: Wolters, 1963). For these labels and their use, see Bakker, “Brain Disease”.

<sup>81</sup>Hart de Ruyter, “Waarin onderscheidt”; Wilhelmina J. Bladergroen, *De scholen voor kinderen met leer- en opvoedingsmoeilijkheden (L.O.M.-scholen)* [The schools for LOM-children] (Groningen, Stichting voor het Kind, [1964]).

<sup>82</sup>A. van der Wissel, *Schooluitval. Een reeks onderzoeken naar cognitieve aspecten van het falen bij kinderen met ernstige leerproblemen* [Dropping out of school. A series of studies into cognitive aspects of the failure of children with serious learning problems] (Groningen: Rijksuniversiteit, 1984), 58–67.

from happening, a “retarded learner” could best be placed at a school with an individualised approach, like LOM, or at a pedagogical institute in a special “play-learning class” for six- and seven-year old children who were as yet not ready for the ordinary scholastic regime.<sup>83</sup> A comparable solution was offered by Bladergroen. With the Chief Inspector of special schooling<sup>84</sup> she was of the opinion that the “true” LOM-child embodied the weaknesses of the regular school with its one-sided intellectual orientation. According to her these children were victims of too few opportunities to play and fully develop their sensorial and motor functions, which had made them skip particular developmental steps. In her view cognition was dependent on physical, sensorial and motor development. That is why she blamed modern housing of the 1960s, especially flats, for causing developmental hiatuses.<sup>85</sup>

As to individual remedial teaching methods LOM-schools have played an important role as didactic laboratories. For reading, this concerned for example Grace Fernald’s method, based on Samuel Orton’s neurological theory, in which seeing, hearing, and touching words were integrated.<sup>86</sup> Special books for “children who think of reading as difficult” were developed, to which audiovisual means were later added. Play, self-correction, activation, and – from the 1970s – multiple “function training” were central activities in the LOM-school, all of which focused on pleasure and motivation for learning. Spatial awareness was trained by the use of building blocks and construction toys. Playing with these materials was meant to prepare children for the jump from three- to two-dimensional perception. Sorting and classifying objects, as developed in the infant school, promoted language and arithmetic skills. Mosaic materials were used to support the training of expression and knowledge of forms and colours.<sup>87</sup> After the psychologist William Cruickshank’s manual for the teaching of easily distracted or hyperactive children had been translated in 1970, LOM-schools immediately started to use it. He promoted a method of maximum structuring of the learning process of MBD-children in a minimal stimulation environment. It was based on behaviouristic conditioning and the training of stimulus-control in uncontrolled children. In its wake behaviour modification techniques and a “structured” approach were widely introduced at LOM-schools.<sup>88</sup>

At the end of the 1960s concern about the rapid growth and the quality of LOM-schooling made educationalists and psychologists finally question if “the” LOM-child existed. It was now emphasised that LOM-children were multiple<sup>89</sup> and their development was extremely unpredictable.<sup>90</sup> Two conferences were dedicated to these problems. Suggested solutions varied from more research, more academics involved with these schools, more intensive expert guidance of the teaching staff, better schooling of teachers, and permanent availability at the LOM-school of a social worker, to stricter selection procedures and particularly the

<sup>83</sup>Hart de Ruyter, “Waarin onderscheidt”.

<sup>84</sup>Doornbos, *Inventarisatie-onderzoek*, 17–49.

<sup>85</sup>Bladergroen, *De scholen*.

<sup>86</sup>Rietveld-van Wingerden, *Van woordblindheid*, 38–41.

<sup>87</sup>Berk et al., *Kinderen*; Trinks-Bakker et al., *Inventarisatie-onderzoek*.

<sup>88</sup>William M. Cruickshank, *The Brain-Injured Child in Home, School, and Community* (New York: Syracuse University Press, 1967); William M. Cruickshank, *Buitenbeentjes. Kinderen met hersenbeschadigingen thuis, op school en in de groep. Vertaald en bewerkt voor Nederland door J. Valk* [Outsiders. Brain-injured children at home, at school, and in the group. Translated and adapted for the Netherlands by J. Valk], 4th ed. (Rotterdam: Lemniscaat, 1975). These methods were still used in the 1980s and 1990s: J.D. van der Ploeg, *Behandeling van gedragsproblemen. Initiatieven en inzichten* [Treatment of behavioural problems. Initiatives and insights] (Rotterdam: Lemniscaat, 2005).

<sup>89</sup>Doornbos, *Inventarisatie-onderzoek*, 146–8.

<sup>90</sup>B.J.G. Bremer, “De L.O.M.-school in perspectief [The LOM-school in perspective],” in Bolle et al., eds., *Psychologen over het kind. Kinderpsychologische opstellen*, 53–62.

improvement of regular schooling.<sup>91</sup> Some experts stuck to the concept of “partial defects” as identifying characteristic of LOM-pupils. Others moved on to the wisdom that learning problems had multiple causes<sup>92</sup> or were better described as “underachievement”, a concept derived from the latest American empirical research into cognitive functioning of learning-disabled children.<sup>93</sup> Either way, they emphasised that each child was different and had different educational needs.

In spite of the doubt as to the reality of a nucleus of “true” LOM-children, for some time teachers and researchers did not yet want to lose the LOM-school. If it was true that learning deficiencies could just as well be secondary symptoms of emotional distress, or the other way round that learning problems caused emotional distress, this did not undo the need for this kind of school and its individualised approach. Or, if LOM-schooling had to be contained within certain limits, this highlighted the need for remedial teaching in the regular school and the earliest possible diagnosis in order to prevent a child’s learning problems from unnecessary deterioration because of late discovery. According to some it was simple: all LOM-children showed “neurotic symptoms” which needed treatment badly.<sup>94</sup> Others instead insisted on their normalcy by emphasising that “behind every child at a LOM-school, there are certainly ten others whose development is just as much endangered”.<sup>95</sup> LOM-schooling provided regular schools with a mirror revealing the truth of its own failings, some people claimed. That is why, despite the multifaceted character of the LOM-child and the accumulation of disorders among LOM-pupils, some researchers kept trying to describe “the” LOM-child and to introduce instruments to be able to better identify that child, next to improving LOM-schooling by developing remedial didactics.<sup>96</sup>

Shortly after 1970 the use of the WISC intelligence test became the new standard in selection procedures and in research that elaborated on their results.<sup>97</sup> Its various sets of subtests allowed for the production of a verbal and a performal IQ score, as well as a score for spatial or analytic insight, and one for concentration. To measure working speed, regularity, and accuracy researchers sometimes used the Dutch version of the decades-old French Bourdon test, the Bourdon-Wiersma test.<sup>98</sup> LOM-pupils turned out to have a disharmonious intelligence profile: much higher performal than verbal IQ scores and, compared to ordinary pupils, a low verbal IQ, a good spatial insight, a slow working speed (especially in reading), next to a low level of regularity, concentration, and accuracy.<sup>99</sup> Measuring of social competence instead of the performal IQ by means of the Vineland Social Maturity Scale, developed in 1953 in the US and translated into Dutch as the Dolderse Schaal, as suggested

<sup>91</sup>*Buitengewoon onderwijs aan kinderen met leer- en opvoedingsmoeilijkheden. Verslag van een Seminar* [Special education for children with learning and behavioural problems. Report of a seminar] (Amsterdam: Nationale Federatie voor de Geestelijke Volksgezondheid, [1969]); *Leer- en opvoedingsmoeilijkheden. Verslag van de L.O.M. conferentie gehouden op 16 en 17 oktober 1969 in het Evert Kupersoord te Amersfoort* [Learning and behavioural problems. Report on the LOM-conference on 16 and 17 October 1969 at the Evert Kupersoord in Amersfoort] (’s Gravenhage: CPS, [1970]).

<sup>92</sup>Vliegenthart, “De psycholoog”.

<sup>93</sup>Van Meel, *Bedreigd denken*.

<sup>94</sup>*Leer- en opvoedingsmoeilijkheden*, 16–37.

<sup>95</sup>Bremer et al., *Een LOM-school*, 58.

<sup>96</sup>Doornbos, *Inventarisatie-onderzoek*; Trinks-Bakker et al., *Inventarisatie-onderzoek*.

<sup>97</sup>Roe, “Testgebruik”. In 1981/1982 54% of LOM-pupils were tested with WISC-R and 27% with Stanford-Binet: Meijer, *L.O.M.-onderwijs*, 105.

<sup>98</sup>This test was first developed in 1932 and adapted in the early 1960s: Bremer et al., *Een LOM-school*.

<sup>99</sup>Van Meel, *Bedreigd denken*; Bremer et al., *Een LOM-school*; A.Th. Jansen, *Enkele psychologische kenmerken van LOM-ULO leerlingen* [Some psychological characteristics of LOM-ULO pupils] (Leiden: Psychologisch Instituut van de Rijksuniversiteit, [1970]); Van der Wissel, “Percepties”.

at one of the LOM-conferences in 1969,<sup>100</sup> was not adopted in the selection procedures for LOM-schools or in research. This highlights the way LOM-schooling developed away from the diagnosis and treatment of behavioural problems, and consequently from psychiatry as field of expertise, and towards the exclusive study of learning disabilities and the development of orthodidactics. These studies aimed directly at improvement in teaching practice and usually included only small numbers of pupils.

Around 1980 some Dutch psychologists and educationalists followed American researchers who focused on the aetiology and treatment of reading problems, now identified as “dyslexia”.<sup>101</sup> Others were inspired by research into the cognitive functioning of learning-disabled children from a generalised perspective. They broke with the tradition of isolating particular learning difficulties. Moreover, they denied the reality of a basic difference between general and special learning difficulties and, consequently, the idea that LOM-children differed fundamentally from mildly mentally retarded (MLK) children. The distribution of learning-disabled children between the two kinds of school turned out to be arbitrary, except for the level of their IQ scores. At group level the weak language performance of LOM-pupils turned out to be the only significant difference between the two groups of children.<sup>102</sup> Other researchers suggested a very simple reason for at least part of LOM-children’s learning problems: relatively many were born in spring and summer and belonged, consequently, to the youngest pupils of their grades. Strictly simultaneous group teaching in the regular school was to blame, as it acted as a straightjacket preventing the youngest, most playful children from acting their age, one of the researchers claimed.<sup>103</sup> These and other findings, reinforced by the positive results of experiments with bringing together LOM- and MLK-pupils, meant a death sentence for the LOM-school as a distinct kind of special school.<sup>104</sup>

## Conclusion

The introduction of the LOM-school promoted testing, the introduction of new tests, and the scientific study of learning problems and their treatment in and outside the regular school. As matter of fact the LOM-school acted more particularly as a laboratory for the development of all kinds of therapeutic treatment of learning disabilities like dyslexia and dyscalculia, demonstrated for example by innumerable contributions to professional journals by educationalists involved with the teaching in these schools.<sup>105</sup> Apart from testing, the most valuable contribution of the LOM-school’s culture of knowledge production to child science, therefore, has been the systematic reflection on the largely individualised therapeutic treatment of learning-disabled children, based on long-term classroom observation

<sup>100</sup> *Leer- en opvoedingsmoeilijkheden*. This scale had the advantage that it was allowed to be used by a teacher because it was called a “scale” instead of a “test”, a development that was of course rejected by a psychologist who defended testing as an exclusive right for psychologists and educationalists with a licence for testing: Vliegenthart, “De psycholoog”.

<sup>101</sup> For example Dumont, *Leerstoornissen* (1978). See also note 79.

<sup>102</sup> Pijl, *Het toelatingsonderzoek*; Van der Wissel, “De verwijzingen”; Van der Wissel, *Schooluitval*.

<sup>103</sup> Doornbos, *Inventarisatie-onderzoek*; K. Doornbos, *Geboortemaand en schoolsucces* [Birth month and school success] (Groningen: Wolters-Noordhoff, 1971). The same overrepresentation of the youngest pupils is found with ADHD children today: H. Zoega, U.A. Valdimarsdóttir, and S. Hernández-Díaz, “Age, Academic Performance, and Stimulant Prescribing for ADHD: A Nationwide Cohort Study”, *Paediatrics* 130, no. 6 (2012): 1012–18.

<sup>104</sup> Van der Wissel, *Schooluitval*.

<sup>105</sup> J. van Weelden, *Samenvatting en overzicht van het pedagogisch-didactisch onderzoek in de praktijk van het buitengewoon onderwijs* [Survey and summary of educational and didactic research into the practice of special education] (Zwolle: Compas, 1970).

and more or less standardised reports by teachers and increasingly also university-trained special educationalists. This kind of study was, as a rule, not based on extensive empirical research, but stuck to the improvement of teaching practice, about which it was emphasised that each child was different and had different educational needs. In particular, slow practices of classroom observation made special education studies gain status as an academic field, as they supported effective interventions and did not aim at the categorisation of pupils as such. The case of LOM-schooling shows that quick and slow means of selection and admission supplement each other. In addition, as a consequence of the scientisation of special education, the results of the quick means of testing could in the end finish off a costly kind of special schooling.

### Disclosure statement

No potential conflict of interest was reported by the author.

### Notes on contributor

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